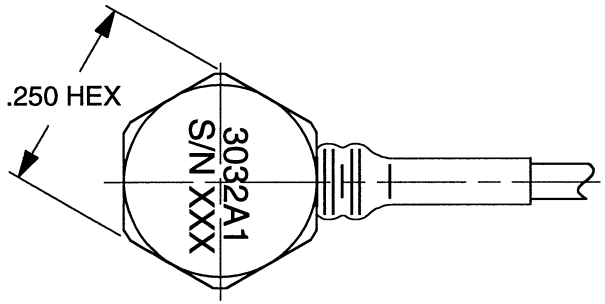

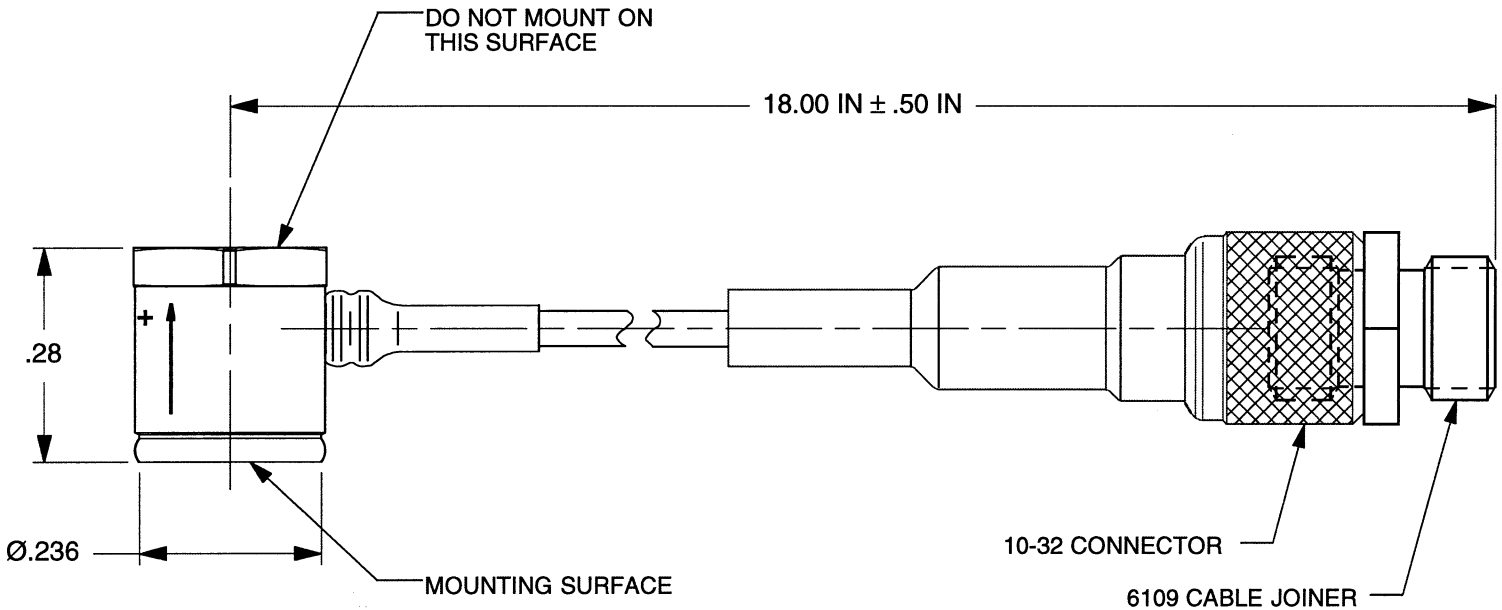

DYTRAN INSTRUMENTS, INC.

MASTER
ONLY IF IN RED

CHATSWORTH, CA.

SCALE 4X	REV A	DATE 4/1/02	ECN -		
DATE 1/28/00	PART NO. MODEL 3032A1				
DRAWN N.C.	CHECKED R.A.	MAT'L			
APPROVED 4-1-02	NEXT ASSEMBLY		USED ON MODEL 3032A1		

TITLE

OUTLINE/INSTALLATION DRAWING, MODEL 3032A1 (5 mV/G)

DWG NO. **127-3032A1**

SHEET 1 OF 1

2. WEIGHT (LESS CABLE): 1.5 GRAMS .

1. TO REMOVE, (UN-INSTALL) TORQUE GENTLY ON HEX UNTIL ADHESIVE JOINT FAILS IN SHEAR. DO NOT STRIKE TO REMOVE.

SPECIFICATIONS

MODEL 3032A1 MINIATURE QUARTZ SHEAR LIVM ACCELEROMETER

SPECIFICATION	VALUE	UNITS
PHYSICAL		
WEIGHT, LESS CABLE	1.5	GRAMS
WEIGHT, INCLUDING CABLE	5.6	GRAMS
SIZE (HEX x HEIGHT)	.25 x .28	INCHES
MOUNTING PROVISION	ADHESIVE MOUNT	
CONNECTOR, COAXIAL, MOUNTED AT END OF 18 IN CABLE	10-32, UNF-2A	JACK
CASE /CAP MATERIAL	TITANIUM	
ELEMENT TYPE	QUARTZ SHEAR	
PERFORMANCE		
SENSITIVITY, +/-10% [1]	5.0	mV/G
RANGE F.S. FOR +/- 5 VOLTS OUT	+/- 1000	G's
FREQUENCY RESPONSE, +/- 10%	1 to 10,000	Hz
FREQUENCY RESPONSE, +/- 3db	.66 TO 12,000	Hz
MOUNTED RESONANT FREQUENCY, NOM.	80	kHz
EQUIVALENT ELECTRICAL NOISE (RESOLUTION)	.007	G, RMS
AMPLITUDE NON-LINEARITY (ZERO BASED BEST FIT ST.LINE METHOD)	2.0	% F.S., MAX.
TRANSVERSE SENSITIVITY, MAX.	5	PERCENT
STRAIN SENSITIVITY	.001	G's PER MICROSTRAIN @ 250/$\mu\sigma$
ENVIRONMENTAL		
MAXIMUM VIBRATION	1500	G's, RMS
MAXIMUM SHOCK	2000	G's, PEAK
TEMPERATURE RANGE	-60 TO +250	^{O}F
THERMAL COEFFICIENT OF SENSITIVITY	0.06	%/^{O}F
SEAL	EPOXY/WELDED	
ELECTRICAL		
EXCITATION (COMPLIANCE) VOLTAGE RANGE	+20 to +30	VDC
EXCITATION CURRENT RANGE	2 to 20	mA
OUTPUT IMPEDANCE, NOM.	100	OHMS
OUTPUT BIAS VOLTAGE	7to 9	VDC
DISCHARGE TIME CONSTANT, MIN.	0.5	SEC.
OUTPUT SIGNAL POLARITY FOR ACCELERATION TOWARD TOP	POSITIVE GOING	

[1] MEASURED AT 1 G RMS AT 100 HZ PER ISA RP 37.2
[2] A CALIBRATION CERTIFICATE TRACEABLE TO **NIST** IS SUPPLIED WITH EACH INSTRUMENT.